Before the
**FEDERAL COMMUNICATIONS COMMISSION**
Washington, D.C. 20554

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| In the Matter of | ) | |
| | ) | |
| Restoring Internet Freedom | ) | WC Docket No. 17-108 |
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**COMMENTS OF INMARSAT, INC.**


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## I. INTRODUCTION AND SUMMARY

Inmarsat is the leader in global mobile satellite communications, operating a global system of 13 satellites and associated ground infrastructure that offers a wide range of communications solutions to customers on land, in the air, and at sea. Inmarsat's Global Xpress broadband service delivers data speeds of up to 50 Mbps to the most remote and inaccessible locations of the world, and along nearly every point of many long-haul aviation and maritime routes that currently lack high-speed connectivity. Inmarsat also operates mobile satellite services supporting critical communications applications requiring up to 99.999% availability. Inmarsat's global system allows customers across the aviation, maritime, enterprise and government sectors to have reliable and assured access to high-throughput communications including voice, mobile broadband, connected car, Internet of Things, smart society, safety-of-life, and emergency communications applications.

High-speed broadband access is not merely a convenience for consumers; it is critical for making Americans competitive in a 21st century global economy. Inmarsat is at the forefront of expanding broadband access to the most challenging environments and to the most demanding

[1] Inmarsat, Inc. ("Inmarsat") hereby submits comments in response to the above-captioned Notice of Proposed Rulemaking. *Restoring Internet Freedom*, Notice of Proposed Rulemaking, FCC 17-60 (rel. May 23, 2017) ("*NPRM*").

users. In these situations, service availability can depend on network operators' flexibility to use congestion-management and other network management techniques, or to create differentiated services, so that they can keep networks running smoothly and ensure an acceptable baseline experience for all users. Inmarsat may use reasonable network management techniques or differentiated offerings to ensure the availability of high-speed Internet access, but not to give preferred treatment to certain content, services, or applications.

Inmarsat supports reinstatement of the information service classification for broadband Internet access service but, whatever framework the Commission adopts, it must balance the interests served by any rules with the need for companies like Inmarsat to reasonably manage their service offerings and meet consumer expectations. When providers like Inmarsat tailor offerings to meet unique demands and desires, consumers benefit from broadband's expansion into new markets that allow for crafted high-quality, high-speed experiences. Such offerings are targeted at growing the connectivity pie rather than shrinking it, by bringing broadband service to places that otherwise might not have it at all. Inmarsat believes that its service offerings would comply with the Commission's existing Open Internet framework because, by design, these tailored offerings transparently provide access to less than substantially all of the Internet and serve specific consumer and premises-operator demands. Nevertheless, the Commission should use this proceeding to further clarify that such curated offerings are outside of the scope of any net neutrality regulations. If a service is subject to any retained or revised rule, the Commission should ensure flexibility, including a meaningful exception for reasonable network management, to allow providers to accommodate unique technologies, circumstances, and security measures, including those faced by Inmarsat as it utilizes satellites to deploy broadband services everywhere on earth.

## II. SATELLITES ARE A KEY PART OF THE BROADBAND ECOSYSTEM.

Satellite technology is – and will continue to be – an essential component of the plan to meet the Commission's goal of universal broadband availability, not just in rural and remote areas, but also in dense urban environments, in the air, at sea, and following natural disasters. In fact, in some circumstances, satellites provide the *only* option for 25 Mbps/3 Mbps or better broadband and offer the ability to cover some of the most challenging locations that exist anywhere. In this sense, satellite broadband technology helps make the Internet more ubiquitous, by facilitating access to the Internet in places where it has not been previously available. Accordingly, as the Commission looks toward a hyper-connected 5G future for American broadband, satellite technology needs to be a significant part of the conversation. There will be no 5G future without globally available, advanced satellite broadband services to drive inclusive 5G deployment.

Inmarsat stands as a vanguard of the revolutionary innovation driving the satellite industry. Inmarsat operates a global satellite system that offers a wide range of communications solutions to customers at sea, on land, and in the air. Inmarsat's Global Xpress fixed satellite service ("FSS") uses the Ka-band to deliver broadband at speeds of up to 50 Mbps to the most remote and inaccessible locations of the world, and along nearly every point of many long-haul aviation and maritime routes that currently lack high-speed connectivity. Global Xpress is the result of a $1.6 billion investment that included the launch of four high-bandwidth satellites and the construction of an earth station in Lino Lakes, Minnesota. These four satellites, the newest of which was launched in May 2017, operate with a combination of fixed narrow spot beams that enable Inmarsat to deliver higher speeds through more compact terminals, plus steerable beams so that additional capacity can be directed in real-time to where it is needed most. The ground

and space infrastructure supporting Global Xpress uses the 17.7-20.2 GHz and 27.5-30.0 GHz bands for earth-to-space communications and is designed to remain in service for many years. Inmarsat's Global Xpress allows customers across aviation, maritime, enterprise, and government sectors to have reliable and assured access to high-throughput communications.

Recently, Global Xpress has begun to support commercial in-flight broadband Internet service on select flights across Europe on Lufthansa and Austrian Airlines aircraft. With this groundbreaking service, passengers can access functionally tiered Internet service on the device of their choice. As currently structured, three packages are available at different price points depending on whether passengers want to stream videos (FlyNet Stream), browse the world wide web (FlyNet Surf), or simply send emails or use a messaging service (FlyNet Message). The deployment of the Global Xpress Aviation service in Europe foreshadows similar efforts that Inmarsat is pursuing in the United States. This state-of-the-art system demonstrates the reach of satellite broadband connectivity and Inmarsat's commitment to developing groundbreaking products and services.

Inmarsat also is proud to be part of the AT&T team that will provide resilient, highly secure, and highly reliable broadband to the country's first responders and other public safety users. AT&T selected Inmarsat Government to deliver satellite communication solutions as a core team member for its build-out and management of FirstNet, the first nationwide, mission-critical broadband network.[2] Equipped with ubiquitous satellite connectivity, FirstNet will better support the urgent communications needs of public safety users in the United States.

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[2] *Inmarsat Government Selected by AT&T for U.S. FirstNet Network*, Press Release (Mar. 31, 2017), *available at* http://www.inmarsat.com/news/inmarsat-government-selected-att-u-s-firstnet-network/.

## III. BROADBAND PROVIDERS MAY NEED TO REASONABLY CURATE, DIFFERENTIATE, OR MANAGE THEIR OFFERINGS TO ENSURE USER ACCESS AND A BASELINE LEVEL OF SERVICE.

The unparalleled capability of satellite technology to provide global broadband connectivity stems from its unique system architecture. However, satellite broadband providers, among others, require significant flexibility to manage their networks to address the limitations that may be inherent in certain types of offerings and to offer an acceptable level of service to consumers. The ability to provide curated, specialized offerings, and to engage in reasonable network management, brings high-quality broadband service experiences to places that no other broadband solutions can serve effectively, producing concrete consumer benefits. Such tailored offerings are – and should remain – outside the scope of any net neutrality rules. To the extent that the Commission determines that any such rules are appropriate, it should ensure that its approach does not unnecessarily inhibit investment and innovation in new broadband technologies. Accordingly, the Commission should acknowledge that what is reasonable conduct for a satellite operator providing in-flight connectivity will be different from what is reasonable for a terrestrial network operator providing high-speed Internet access to the home.

In some situations, no amount of capacity expansion can eliminate congestion. Or, as a practical matter, it may be impossible to increase capacity to address congestion. In these situations, operators must find other opportunities to preserve access and a high-quality experience – such as reasonable network management and/or differentiated service offerings.

In-flight satellite broadband provides a telling example. In-flight, users share a single connection to a satellite service provider. Although contemporary satellite systems have substantial capacity, limits still exist on the total amount of capacity provided to an individual plane. Although High Throughput Satellites increase system capacity by using numerous spot

beams, supporting additional traffic also creates a need for placement and construction of additional gateway earth stations to connect to the global Internet (something the Commission unfortunately made more challenging last summer, when it introduced new sources of interference and limitations on earth station placement in certain FSS bands).[3] As such, as multiple passengers on a plane use satellite broadband service simultaneously for bandwidth-intensive applications, and as multiple planes connect to a single satellite or beam, a provider will necessarily face capacity constraints that require active management in order to ensure a satisfactory user experience. In past proceedings, the Commission has recognized that it is essential to accommodate the unique characteristics of different broadband technologies, and it should continue and, indeed, expand that approach here.[4]

In addition to addressing capacity constraints, a network operator may have other reasons to engage in reasonable network management or differentiation. For one thing, security and

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[3] *See Use of Spectrum Bands Above 24 GHz for Mobile Radio Services*, Report and Order and Further Notice of Proposed Rulemaking, 31 FCC Rcd 8014 (2016); *see also* EchoStar Satellite Operating Corporation, Hughes Network Systems, LLC, and Inmarsat, Inc. Joint Petition for Reconsideration, GN Docket No. 14-177 (Dec. 14, 2016).

[4] *See, e.g.*, *Protecting and Promoting the Open Internet*, Report and Order on Remand, Declaratory Ruling, and Order, 30 FCC Rcd 5601, ¶ 34 (2015) ("*Title II Order*") (recognizing that "evaluation of network management practices [should] take into account the additional challenges involved in the management of mobile networks, including the dynamic conditions under which they operate"); *id.*, ¶ 223 (noting the need to take into account factors such as "the changing location of users as well as other factors affecting signal quality" in evaluating the reasonableness of mobile broadband network management practices, particularly given the "capacity constraints many mobile broadband providers face"); *id.*, ¶ 224 (acknowledging the need to consider the reasonableness of network management practices of providers relying on unlicensed Wi-Fi networks in light of the "spectrum constraints and congestion issues that can pose particular network-management challenges"); *Preserving the Open Internet; Broadband Industry Practices*, Report and Order, 25 FCC Rcd 17905, ¶¶ 82, 103 (2010) ("*2010 Open Internet Order*") (stating that it is appropriate to "recognize the differences across access platforms such as cable, DSL, satellite, and fixed wireless" and reaffirming the relevance of "technical, operational, and other differences between wireless and other broadband Internet access platforms, including differences relating to efficient use of spectrum").

safety measures are essential. Network operators should be permitted to deploy robust cybersecurity measures on their network, including restricting certain activities, ports, or traffic. The types of restrictions that are reasonable and appropriate may vary depending on the nature of the broadband deployment or use case. Network or aircraft operators might reasonably decide that aviation safety considerations demand a higher level of restrictions on use of in-flight broadband services than would be warranted in a consumer residential broadband deployment. Providers must be given the flexibility to make these case-by-case determinations according to the needs of the deployment scenario.

A network operator also may need to engage in reasonable network management or differentiation for users' benefit or at users' or premises-operators' request. An airline may request an in-flight connectivity provider to help promote a certain atmosphere by, for instance, preventing access to Voice over Internet Protocol services to ensure a quiet environment in the passenger cabin. What is more, current Federal Aviation Administration ("FAA") rules permit airplane operators discretion over the use of personal electronic devices in airplanes, but a prohibition on restricting access to certain applications or services could undermine an airline's ability to exercise this discretion through an arrangement with its in-flight connectivity provider. Other premises operators may have similar incentives. A school, for example, may desire to prevent students from accessing certain harmful content to create a safe learning environment. Likewise, and particularly on airlines and cruise ships, a vessel operator may request that the network operator provide the capability to interrupt broadband service to ensure that important public safety messages – such as messages from the pilot or captain – are conveyed to passengers.

Finally, network operators may engage in reasonable network management or differentiation to comply with laws of the United States or other countries. As indicated above, the FAA has jurisdiction over flight safety, which includes the use of personal electronic devices on airplanes. In a recent NPRM, the FAA sought comment on adopting a prohibition of voice calls over mobile devices on aircraft.[5] Should that agency move forward with its proposal, an inflexible no-blocking rule could place in-flight connectivity providers in the untenable position of having to choose which agency's rules to comply with. Service providers also require flexibility to deal with international vessels. International conventions dictate that the laws of the flag state of an international aircraft generally govern licensing and operation of radiocommunication equipment on board the vessel.[6] The Commission should not subject providers to a Hobson's choice by forcing them to violate another country's laws to comply with FCC regulations. Instead, the agency should allow broadband providers to engage in dynamic decisionmaking regarding their network resources to accommodate the different environments and legal requirements that may apply to various broadband services.[7]

In each of these situations, the network operator's practices are intended to benefit the user. For example, by offering different packages of service, Inmarsat's in-flight connectivity service responds to and facilitates user choice and control over their online activities, including selection of services and applications. The service is provided in a transparent manner, enabling

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5 *Use of Mobile Wireless Devices for Voice Calls on Aircraft*, Department of Transportation, Notice of Proposed Rulemaking, 81 Fed. Reg. 90258 (Dec. 14, 2016).

6 *See* Convention on International Civil Aviation Done at Chicago, Article 33 (Dec. 7, 1944), *available at* https://www.icao.int/publications/Documents/7300_orig.pdf.

7 To be sure, consumers should be aware of the level of service that they are paying for and receiving. However, it is one thing to subject a service to intrusive regulation, and another thing entirely to mandate some form of straightforward disclosure regarding the characteristics of the broadband service that a provider offers at various prices.

users to make an informed choice of the level of service. Within each package, the service offers unimpeded access to a diversity of services, applications, and content offered on a nondiscriminatory basis. Finally, reasonable network management practices are utilized in a manner that is neither anticompetitive nor prejudicial. Services offered in this way enable users to remain in control of their Internet experience and empower them to fully benefit from and participate in it.

## IV. REINSTATING THE "INFORMATION SERVICE" CLASSIFICATION OF BROADBAND INTERNET ACCESS SERVICE UNDER THE COMMUNICATIONS ACT WILL ENSURE APPROPRIATE FLEXIBILITY FOR NETWORK OPERATORS.

In the Telecommunications Act of 1996, Congress directed a hands-off approach to the Internet, declaring it "the policy of the United States . . . to preserve the vibrant and competitive free market that presently exists for the Internet . . . unfettered by Federal or State regulation."[8] For almost two decades, the broadband industry experienced exponential growth under a light-touch regulatory framework, supercharging the U.S. economy to the benefit of American consumers. Accordingly, Inmarsat supports the Commission's decision to "reinstate the information service classification of broadband Internet access service" under the Communications Act in furtherance of the agency's "goal of benefiting consumers through greater innovation, investment, and competition."[9]

The *NPRM* aptly observes that reclassification of broadband Internet access service as an information service "is firmly rooted in Commission precedent," and that the previous "consistent bipartisan framework supported a free and open Internet."[10] The Commission is also

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8 47 U.S.C. § 230(b).

9 *NPRM*, ¶¶ 24-25.

10 *Id.*, ¶ 38.

correct that Internet Service Providers ("ISPs") offer services that fall within the definition of information services, defined in the Act as "the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications."[11] When a provider offers consumers access to services such as Internet browsing, email, instant messaging applications, m-Health and e-Learning services, secure file transfer, and video streaming, it is enabling consumers to "perform each and every one of the functions listed in the definition."[12] Inmarsat thus agrees that "the Commission's statutory interpretation in the *Title II Order* did not adequately reflect proper standards of statutory construction, and that classifying [broadband Internet access service] as an information service is the better reading of the statute."[13] Indeed, the Commission had previously classified broadband Internet access service as an information service in six separate proceedings, [14] and the Supreme Court "decisively upheld" the prior classification of such service provided over cable systems in *Brand X*.[15] As a result, the Commission has ample legal authority to restore the information service classification of broadband Internet access service.

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11 *See id.*, ¶¶ 26-27 (quoting 47 U.S.C. § 153(24)).

12 *Id.*, ¶ 27; *see also id.* ("Whether posting on social media or drafting a blog, a broadband Internet user is able to generate and make available information online. Whether reading a newspaper's website or browsing the results from a search engine, a broadband Internet user is able to acquire and retrieve information online. Whether it's an address book or a grocery list, a broadband Internet user is able to store and utilize information online.").

13 *Id.*, ¶ 54.

14 *See id.*, ¶ 38.

15 *See id.*, ¶¶ 12, 52, 54 (citing and discussing *Nat'l Cable & Telecomms. Ass'n v. Brand X Internet Servs.*, 545 U.S. 967 (2005)).

## V. ANY RETAINED OR NEW RULES SHOULD FURTHER CLARIFY THAT DIFFERENTIATED BROADBAND OFFERINGS ARE OUTSIDE OF THEIR SCOPE.

The Commission has consistently recognized that some types of differentiated broadband offerings are properly considered to be outside of the scope of any "net neutrality" regulations. In the *Title II Order*, for example, the FCC found that its rules should apply to "[a] mass market retail service by wire or radio that provides the capability to transmit data to and receive data from all or substantially all Internet endpoints."[16] Previously, the Commission had exempted "specialized services," including enterprise services, virtual private network services, hosting, and data storage services, from the reach of net neutrality rules.[17] Thus, the Commission's net neutrality rules have never applied to wholesale broadband services sold to resellers. Nor have they applied to services provided directly to enterprise customers.[18] These services are not "mass market retail service[s]," as they are not "marketed and sold on a standardized basis to residential customers, small businesses, and other end-user customers such as schools and libraries."[19]

Any rules that the Commission might retain or adopt should likewise confirm that curated offerings, like Inmarsat's, that provide access to limited suites of Internet-based services do not

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16 *Title II Order*, ¶ 25.

17 *Id.*, ¶ 26; *see 2010 Open Internet Order*, ¶ 112 (specialized services also include "facilities-based VoIP and Internet Protocol-video offerings").

18 Enterprise service offerings "offered to larger organizations through customized or individually negotiated arrangements or special access services," by definition are not broadband Internet access service. *Title II Order*, ¶ 189; *see also id.* at ¶ 190 (finding that "broadband Internet access service does not include virtual private network (VPN) services, content delivery networks (CDNs), hosting or data storage services, or Internet backbone services (to the extent those services are separate from broadband Internet access service")).

19 *Id.*, ¶ 189.

fall within the scope of net neutrality regulation. Indeed, the distinction between providers that offer access to "all or substantially all" endpoints on the Internet as "neutral, indiscriminate conduits" and those that "offer[] access only to a limited segment of websites" was confirmed by even the prior Commission, and was accepted by the D.C. Circuit.[20] As Judge Tatel explained in his concurrence to the denial of rehearing *en banc* in *USTelecom*, even the current rules "do[] not apply to an ISP . . . making sufficiently clear to potential customers that it provides a filtered service involving the ISP's exercise of 'editorial discretion.'"[21] Put another way, if an ISP "were to choose to hold itself out to consumers as offering them an edited service rather than indiscriminate internet access . . . it could then bring itself outside the rule[s]."[22]

Any new rules that the FCC might adopt in this proceeding should certainly not reach farther than those adopted by previous Commissions, and should thus clearly exempt curated services such as Inmarsat's from their reach. And even if the FCC were for some reason to continue to classify broadband services that *do* offer access to all parts of the Internet as telecommunications services subject to common carrier regulation rather than as information services, it could not possibly justify the same treatment for curated offerings. This is true because the latter category of services offer to the public different levels of Internet functionality, placing them squarely within the definition of an information service. By their very nature, such services do not offer indiscriminate access to the entire Internet,[23] and the Commission could not

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20 *U.S. Telecom Ass'n v. FCC*, 825 F.3d 674, 743 (D.C. Cir. 2016) ("*USTelecom*").

21 *U.S. Telecom Ass'n v. FCC*, 855 F.3d 381, 389 (D.C. Cir. 2017) (denying rehearing *en banc*) (Tatel, J., concurring).

22 *Id.* at 390.

23 "[C]ommon carrier status turns on: (1) whether the carrier 'holds himself out to serve indifferently all potential users;' and (2) whether the carrier allows 'customers to transmit intelligence of their own design and choosing.'" *United States Telecom Ass'n v. FCC*, 295 F.3d 1326, 1329 (D.C. Cir. 2002). Providers offering curated services do not satisfy the second part

compel such an offering without a finding of market failure.[24]

Moreover, the Commission should no longer subject services that fall outside the scope of its net neutrality rules to potential enforcement action if it finds that such services "are undermining investment, innovation, competition, and end-user benefits."[25] At an absolute minimum, services with inherent capacity constraints or which are offered in a particular manner to meet consumer or premises-operator demands should be exempt from such scrutiny. The test articulated by the previous Commission for when enforcement action might be appropriate is far too open-ended to provide useful direction for companies striving to introduce new service offerings, and its retention would chill innovation and, ultimately, harm consumers.

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of this test, as they offer access to only limited portions of the Internet, and in some cases they may not satisfy the first part either. *See USTelecom*, 825 F.3d at 743 (broadband providers subject to net neutrality rules "include[] only those broadband providers that hold themselves out as neutral, indiscriminate conduits. Providers that may opt to exercise editorial discretion – for instance, by offering access only to a limited segment of websites specifically catered to certain content – would not offer a standardized service that can reach 'substantially all' endpoints. The rules therefore would not apply to such providers, as the FCC has affirmed.") (citing Brief of Federal Communications Commission and United States, Nos. 15-1063, *et al.*, at 81, 146 n.53 (D.C. Cir. Sept. 14, 2015)).

[24] *See, e.g.*, *USTelecom*, 825 F.3d at 749 (Williams, J., concurring in part and dissenting in part) ("the Commission has for nearly four decades made the presence or prospect of competition the touchstone for refusal to apply Title II"); *Virgin Islands Tel. Corp. v. FCC*, 198 F.3d 921, 925 (D.C. Cir. 1999) (noting relevance of market power to common carrier analysis); *see also USTelecom*, 825 F.3d at 708 (confirming that the FCC did not make any finding of market power in the *Title II Order*); *see also Title II Order*, ¶ 11 n.12 ("these rules do not address, and are not designed to deal with, the acquisition or maintenance of market power or its abuse, real or potential"); *id.* ¶ 384 (disavowing any intent to "'require' that any service 'be offered on a common carriage basis'").

[25] *NPRM*, ¶ 94.

## VI. ANY RETAINED OR NEW RULES SHOULD RECOGNIZE A "REASONABLE NETWORK MANAGEMENT" EXCEPTION THAT ACCOMMODATES THE SPECIAL CIRCUMSTANCES OF DIFFERENT TECHNOLOGIES AND ENVIRONMENTS.

To the extent that they apply to a given service, any rules retained or adopted in this proceeding should permit "reasonable network management" to allow operators to react to the unique circumstances of their networks and customer environments. The FCC, based on its authority in the Act, has a long history of permitting reasonable discrimination and differentiated service offerings, even by Title II common carriers. Indeed, Section 202(a) of the Act states that "[i]t shall be unlawful for any common carrier to make any unjust or *unreasonable* discrimination in charges, practices, . . . facilities, or services for or in connection with like communication service . . . by any means or device, or to make or give any undue or unreasonable preference or advantage to any particular person,"[26] making clear that *reasonable* discrimination is permissible even within a common carrier offering.[27]

This statutory authority and resulting precedent provided the backdrop for the FCC's approach in the *2010 Open Internet Order*.[28] There, the Commission clarified that "discrimination by a broadband provider that constitutes 'reasonable network management' is 'reasonable' discrimination."[29] The *2010 Open Internet Order* defined a "reasonable network management" practice as one "appropriate and tailored to achieving a legitimate network

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26 47 U.S.C. § 202(a).

27 *See, e.g.*, *Orloff v. FCC*, 352 F.3d 415, 420 (D.C. Cir. 2003) ("§ 202 prohibits only unjust and unreasonable discrimination in charges and service. Orloff is therefore not entitled to prevail merely by showing that . . . Verizon engaged in discrimination. Verizon may still show that the difference in treatment was reasonable.").

28 *See generally 2010 Open Internet Order*.

29 *Id.*, ¶ 68.

management purpose, taking into account the particular network architecture and technology of the broadband Internet access service."[30] The Commission further "acknowledge[d] that reasonable network management practices may differ across platforms" and that, for example, "practices needed to manage congestion on a fixed satellite network may be inappropriate for a fiber-to-the-home network."[31] The agency emphasized, moreover, that "[b]roadband providers should have flexibility to experiment, innovate, and reasonably manage their networks."[32] Indeed, even in the *Title II Order*, the FCC pledged to "take into account" differences in "network architecture and technology" in evaluating the reasonableness of practices.[33]

The diversity of services that exist today and that are on the horizon, along with the multitudes of communications technologies capable of providing broadband Internet access service, warrant a flexible standard for determining what constitutes "reasonable network management" under any net neutrality rules. With respect to managed broadband services that are utilized in-flight, on ships, during disasters, and in similar situations, it is important to recognize that users rely upon these services only temporarily, and otherwise have ready access to a broad array of competitive alternatives for full access to the Internet. To the extent that such services might be subject to regulation at all, a flexible approach – and particularly one that accounts for the distinctive network architecture and unique situational circumstances of satellite systems – will not cause any consumer or competitive harm and is necessary to avoid creating disincentives to investment and innovation.

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30 *Id.*, ¶ 82.

31 *Id.*, ¶ 86.

32 *Id.*, ¶ 92; *see also supra* n.4.

33 *Title II Order*, ¶ 224.

In like manner, any rules the FCC retains or adopts should eliminate the *Title II Order*'s guidance that a practice will be considered "reasonable" only if used for a "technical management justification rather than other business justifications."[34] As demonstrated above, providers may have legitimate business reasons, including cybersecurity, requests by their customers, or the need to comply with differing legal requirements, to differentiate their service offerings that this aspect of the *Title II Order* could needlessly prohibit. Similarly, the Commission should permit a provider to offer users different levels of access "based solely on the particular plan to which the user has subscribed."[35] Consumers desire access to differentiated services and, as discussed above, some providers have valid technical and business reasons to offer such services. Restricting differentiation on this basis would chill innovation by forbidding business practices that providers could employ for reasonable management of their networks, and that would ultimately benefit – rather than harm – consumers.

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34 *NPRM*, ¶ 93.

35 *Id.*, ¶ 93 n.203.

## VII. CONCLUSION

As a global leader in innovative satellite broadband products and services, Inmarsat fully supports the Commission's proposal to reinstate the information service classification of broadband Internet access service. Satellite broadband technology plays a crucial role in the broadband ecosystem, with its unique system architecture producing differentiated service offerings. If the Commission decides to retain any net neutrality rules, it should recognize that curated services properly fall outside of the scope of such rules, and should include a "reasonable network management" exception that accommodates the special circumstances of different types of networks and providers.

Respectfully submitted,

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